

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

此份有關你的食水報告,內有重要資料和訊息,請找 他人為你翻譯及解釋清楚。 As a trusted leader in the industry, American Water places a strong emphasis on sharing water quality information with our customers.

Please review this Consumer Confidence Report (CCR), which outlines information applicable to your local water system for testing completed through December 2011. You'll find that we provide water that surpasses or meets all Federal and State water quality regulations.

Our customers are our top priority, and we are committed to providing them with the highest quality drinking water and service possible now and in the years to come. In addition to this written report, you can view information about your water system at: www.ci.east-palo-alto.ca.us

SFPUC Drinking Water Sources

The sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells. The major source of your water supply originates from spring snowmelt flowing down the Tuolumne River to the Hetch Hetchy Reservoir, where it is stored. This pristine Sierra water source meets all federal and state criteria for watershed protection. The SFPUC maintains stringent disinfection treatment practices, extensive bacteriologicalquality monitoring, and high operational standards. As a result, the CDPH and USEPA have granted the Hetch Hetchy water source a filtration exemption. In other words, the source is so clean and protected that filtration of water from the Hetch Hetchy Reservoir is not required.

The Hetch Hetchy water is supplemented with surface water from two local watersheds. Rainfall and runoff from the Alameda Watershed – within the greater 128,424-acre Southern Alameda Creek Watershed and spanning more than 35,000 acres in Alameda and Santa Clara counties – are collected in the Calaveras and San Antonio reservoirs and treated at the Sunol Valley Water Treatment Plant.

Rainfall and runoff from the 23,000-acre Peninsula Watershed in San Mateo County are stored in Crystal Springs, San Andreas, and Pilarcitos reservoirs and treated at the Harry Tracy Water Treatment Plant.

In 2011, the Hetch Hetchy Watershed provided the majority of the total water supply, with the remainder contributed by the two local watersheds.

Watersheds Protection

The SFPUC actively protects the water resources entrusted to its care. Hetch Hetchy Watershed is surveyed annually to evaluate the sanitary conditions, water quality, potential contamination sources, and the results of watershed management activities conducted by SFPUC and its partner agencies (including National Park Service and US Forest Service). Once every five years the local watersheds and the approved standby water sources in Early Intake Watershed, which includes Cherry Lake and Lake Eleanor are surveyed. The latest 5-year survey was completed in 2011 for the period of 2006-2010. These surveys identified wildlife, stock, and human activities as potential contamination sources. The reports are available for review at the CDPH San Francisco District office, 510-620-3474.

SFPUC's New UV Disinfection Facility – Largest in California

In the summer of 2011, the SFPUC began using ultraviolet (UV) light as an additional disinfection step for the Hetch Hetchy water supply. The new Tesla Treatment Facility uses state-of-the-art UV treatment equipment to provide advanced disinfection for the Hetch Hetchy supply in the Regional Water System which serves 2.5 million customers. The facility was built to comply with the USEPA regulation that requires an additional disinfectant by April 2012 to protect the water supply from the *Cryptosporidium* parasite. The facility can treat up to 315 million gallons of water per day – making it the largest UV drinking water treatment plant in California and the third largest in the U.S.

Water Quality: Contaminants and Regulations

SFPUC Water Quality Division regularly collects and tests water samples from reservoirs and designated sampling points throughout the system to ensure that the water delivered to you meets or exceeds federal and state drinking water standards. In 2011, Water Quality staff conducted more than 69,875 drinking water tests in the transmission and distribution systems. This monitoring effort is in addition to the extensive treatment process control monitoring performed by our certified and knowledgeable treatment plant staff and online instruments.

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Such substances are called contaminants. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline 800-426-4791.

How To Contact Us

For more information about the contents of this report, contact Gopi Nathan (650) 325-6195, or visit us online at www.ci.east-palo-alto.ca.us.

Water quality policies are decided at public hearings held at the EPA Government Center 2415 University Ave - First Floor - City Council Chamber. For more information visit: www.ci.east-palo-alto.ca.us.

This state-mandated annual report contains important information on the quality of your drinking water.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

Cryptosporidium is a parasitic microbe found in most surface water. The SFPUC regularly tests for this waterborne pathogen, and found it at very low levels in source water and treated water in 2011. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Ingestion of Cryptosporidium may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Reducing Lead from Plumbing Fixtures

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of East Palo Alto is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline 800-426-4791, or at www.epa.gov/safewater/lead.

Special Health Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants can be particularly at risk from infections.

These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791 or at www.epa.gov/safewater.

Key Water Quality Terms

Following are definitions of key terms noted on the adjacent water quality data table. These terms refer to the standards and goals for water quality described below.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG):

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Regulatory Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Turbidity: A water clarity indicator that is also used to indicate the effectiveness of the filtration plants. High turbidity can hinder the effectiveness of disinfectants.

2011 Water Quality Data for Wholesale Customers' CCR Use

The attached table lists all 2011 detected drinking water contaminants and the information about their typical sources. Contaminants below detection limits are not shown, in accord with the California Department of Public Health (CDPH) guidance. The CDPH allows the SFPUC to monitor for some contaminants less than once per year because their concentrations do not change frequently. We received from the CDPH a monitoring waiver for some contaminants that were absent in the water.

City of East Palo Alto - Water Quality Data for Year 20111

DETECTED CONTAMINANTS							
Substance	Unit	MCI	L	PHG or (MCLG)	Range or Level	Found Average or [Max]	Major Sources in Drinking Water
TURBIDITY							
For Unfiltered Hetch Hetchy Water	NTU	5		NA	0.2 - 0.7	[2.1] 3	Soil runoff
For Filtered Water from Sunol Valley	NTU	14		NA	-	[0.36]	Soil runoff
Water Treatment Plant (SVWTP)	-	min 95% of sampl	les ≤ 0.3 NTU ⁴	NA	99.9% - 100	0% -	Soil runoff
For Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	14		NA	-	[0.18]	Soil runoff
	-	min 95% of samples ≤ 0.3 NTU ⁴		NA	100%	-	Soil runoff
DISINFECTION BY-PRODUCTS AND	PRECURSOR (SF	PUC Regional System	n) - for Informatio	n Only			
Total Trihalomethanes	ppb	80		NA	10 - 84	[45] 5	By-product of drinking water chlorination
Haloacetic Acids	ppb	60		NA	4 - 59	[33] 5	By-product of drinking water chlorination
Total Organic Carbon ⁶	ppm	Π		NA	2.6 - 2.9	2.7	Various natural and man-made sources
Chloramine (as chlorine)	ppm	MRDL = 4.0		MRDLG = 4	1.18 - 4.0	0 2.345	Drinking water disinfectant added for treatment
DISINFECTION BY-PRODUCTS AND	PRECURSOR						·
Total Trihalomethanes	Trihalomethanes ppb		80		43.5 - 52.	48.15	By-product of drinking water chlorination
Haloacetic Acids	ppb	60		NA	29.3 - 45.	8 29.3 ⁵	By-product of drinking water chlorination
MICROBIOLOGICAL						·	·
Total Coliform	-	≤ 5.0% of mon	thly samples	(0)	-	0	Naturally present in the environment
Giardia lamblia	cyst/L	Π		(0)	ND - 0.07	0.07	Naturally present in the environment
INORGANIC CHEMICALS						·	•
Fluoride (source water) ⁶	ppm	2.0		1	ND - 0.8	0.37	Erosion of natural deposits
RADIONUCLIDES							•
Radium-226	pCi/L	NA		0.05	ND - 1.2	<1	Erosion of natural deposits
CONSTITUENTS WITH SECONDA	RY STANDARD	S					
Substance	Unit	SMCL	PHG	Range		Average	Typical Sources of Contaminant
Aluminum ⁸	ppb	200	600	ND - 53		<50	Erosion of natural deposits
Chloride	ppm	500	NA	3 - 20		11	Runoff; Leaching from natural deposits
Color	unit	15	NA	<5 - 9		<5	Naturally occurring organic materials
Specific Conductance	μS/cm	1600	NA	39 - 2	289	181	Substances that form ions when in water
Sulfate	ppm	500	NA	1.3 - 36		18	Runoff; Leaching from natural deposits
Total Dissolved Solids	ppm	1000	NA	83 - 194		132	Runoff; Leaching from natural deposits
Turbidity	NTU	5	NA	0.06 -	0.35	0.16	Soil runoff
LEAD AND COPPER							
Substance	Unit	AL	PHG	Rang	ge	90th Percentile	Typical Sources in Drinking Water
Copper	ppm	1300	300	<0.001 - 0.225 ⁹		0.047	Corrosion of household plumbing systems
Lead	ppb	15	0.2	<1 - 2	11 10	6	Corrosion of household plumbing systems
OTHER WATER QUALITY PARAM	ETERS						
Substance		Unit		ORL		Range	Average
Alkalinity (as CaCO3)		ppm		NA		10 - 84	49
Calcium (as Ca)		ppm		NA		3 - 24	13
Chlorate 11		ppb		(800) NL		36 - 488	89
Hardness (as CaCO3)		ppm		NA		10 - 98	57
Magnesium		ppm		NA		<0.04 - 8.2	4.9
pH		-		NA		6.7 - 9.7	8.6
pii	Sodium		ppm				

Notes:

- ¹ All results met State and Federal drinking water health standards.
- ² Turbidity is measured every four hours. These are monthly average turbidity values.
- ³ This is the highest turbidity of the unfiltered water served to customers in 2011. This turbidity spike was the result of flow rate change, and it was not observed downstream at Alameda East.
- ⁴ There is no turbidity MCL for filtered water. The limits are based on the TT requirements in the State drinking water regulations.
- ⁵ This is the highest quarterly running annual average value.
- ⁶ The SFPUC adds fluoride to the naturally occurring level to help prevent dental caries in consumers. The CDPH requires our fluoride levels in the treated water to be maintained within a range of 0.8 ppm 1.5 ppm. In 2011, the range and average of our fluoride levels were 0.6 ppm 1.3 ppm and 1.0 ppm, respectively.
- The naturally occurring fluoride levels in the Hetch Hetchy and SWTP raw water were ND and 0.12 ppm, respectively. The HTWTP raw water had elevated fluoride levels of 0.6 ppm 0.8 ppm due to the continued supply of the fluoridated Hetch Hetchy & SWTP treated water into the Lower Crystal Springs Reservoir, which supplies water via the San Andreas Reservoir to the HTWTP for treatment.
- $^{\circ}$ Aluminum also has an MCL of 1000 ppb.
- ⁹ The most recent Lead and Copper Rule monitoring was in 2009. 0 of 30 water samples collected at consumer taps had copper concentrations above the Action Level.
- ¹⁰ The most recent Lead and Copper Rule monitoring was in 2009. 1 of 30 water samples collected at consumer taps had lead concentrations above the Action Level.
- ¹¹ The detected chlorate in treated water is a degradation by-product of sodium hypochlorite, the primary disinfectant used by SFPUC for water disinfection.

 Note: Additional water quality data may be obtained by calling the City of East Palo Alto water system (650) 325-6195.

KEY:				
≤</td <td colspan="4">less than/less than or equal to</td>	less than/less than or equal to			
AL	Action Level			
Max	Maximum			
Min	Minimum			
NA	Not Available			
ND	Non-Detect			
NL	Notification Level			
NTU	Nephelometric Turbidity Unit			
ORL	Other Regulatory Level			
ppb	part per billion			
ppm	part per million			
μS/cm	microSiemens/centimeter			